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# THE DETERMINATION OF DOMINANCE AND THE MODIFICATION OF BEHAVIOR IN ALTERNATIVE (MENDELIAN) INHERITANCE, BY CONDITIONS SURROUNDING OR INCIDENT UPON THE GERM CELLS AT FERTILIZATION.

WILLIAM LAWRENCE TOWER.

## A CORRECTION AND ADDENDUM.

In the preparation of the paper which appeared in this journal under the above title, certain minor experiments were taken from a larger series and combined to illustrate a general point in the behavior of alternative characters in inheritance. Through some unhappy oversight the data and plate of Ex. No. H. 410 was introduced into the printer's copy in place of the experiment intended for the position and indicated by the remainder of the paper. In this correction and addendum I have supplied the necessary data of the proper experiment with the corresponding illustration, which replaces Plate II. in the original paper. I am indebted to Professor Cockerell for calling my attention to this misplacement.

On page 294 of Vol. XVIII. of this journal, substitute the following for the account given under Ex. No. H. 410.

*L. signaticollis* ♀ × ♂ *L. diversa*.

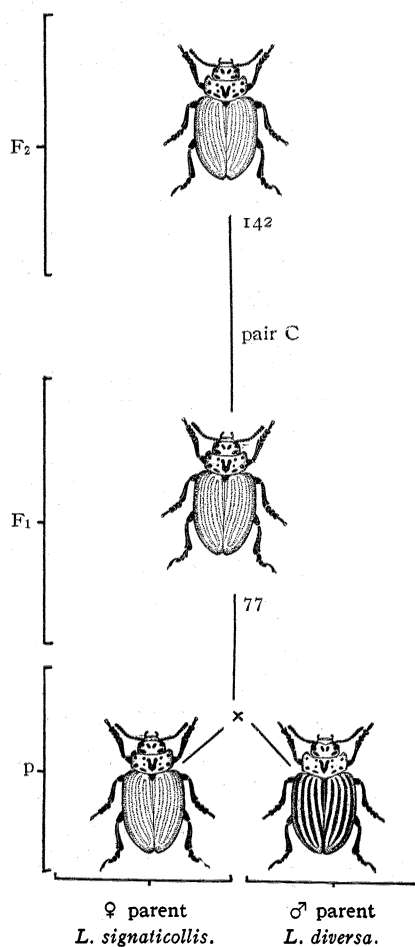
Ex. No. H. 411.

When a cross was made between a female *L. signaticollis* and a male *L. diversa* of exactly the same stocks as described in Ex. No. H. 409, under the following conditions a quite different result was obtained.

Food: normal and uniform.

T.		R. H.	
Day Av.	75° F. ± 5° F.	Day Av.	50 per cent. ± 10 per cent.
Night Av.	50° F. ± 5° F.	Night Av.	80 per cent. ± 15 per cent.

In the  $F_1$  generation of this experiment there was only one class of adults and these were all of the female type and exhibited a narrow range of variability. These when inbred, gave in  $F_2$



This illustration replaces Plate II. of the original paper in Vol. XVII., p. 340. Arranged to show the results obtained in crossing *L. signaticollis* ♀ × ♂ *L. diversa* under the conditions of Ex. No. H. 411. The differences in results shown between H. 410 and H. 411 are due to factors not considered in the original paper.

the same type without the least trace of separation into categories, and with the same low range of variability. When again inbred, they gave in  $F_3$ , the same type without the least trace of the attributes of the male parent stock. Altogether I have repeated this experiment six times with identical results. All have been carried to  $F_3$  and some of them to  $F_5$  and  $F_6$ . In the plate which accompanies this correction is shown the behavior of  $F_1$  and  $F_2$ .

On page 295, line 25, for Ex. No. H. 410 read Ex. No. H. 411

"	"	304	"	3	"	"	"	410	"	"	"	"	411
"	"	304	"	12	"	"	"	410	"	"	"	"	411
"	"	304	"	14	"	"	"	410	"	"	"	"	411
"	"	304	"	19	"	"	"	410	"	"	"	"	411
"	"	330	"	12	"	"	"	410	"	"	"	"	411
"	"	334	"	4	"	"	"	410	"	"	"	"	411

Throughout the paper the references are to Ex. No. H. 411 instead of H. 410.

The description and plate of Ex. No. H. 410 are correct as are the conditions of experiment as far as given. This experiment, however, is from a second series of cultures parallel to the one given, but in which there are other factors involved, which in H. 410 are productive of a typical Mendelian behavior. I do not at this time care to make any statement of what these factors are, nor of their relation to the behaviors given in the H. 409, H. 411, H. 409/11 series which are the simplest and most easily presented series obtained in the crossing of *L. signaticollis* and *L. diversa*.

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